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(54) **LIPOSOMES CONTAINING NOVEL
TARGETING AND/OR FUSOGENIC
PEPTIDES, PREPARATIONS CONTAINING
THEM AND THERAPEUTIC USE THEREOF**

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(52) **U.S. Cl.** **530/300**; 530/325; 530/329;
514/2; 424/1.69

(58) **Field of Classification Search** 514/2
See application file for complete search history.

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(57) **ABSTRACT**

A novel targeting peptide from the C-terminal of endothelin and/or a novel fusogenic peptide from hemagglutinin are optionally conjugated to the carboxy group of 1,2-dioleoyl-sn-glycero-3-succinate and incorporated into liposomes for therapeutic treatment. The novel targeting peptide directs liposomes to lung cells, and, therefore, is useful for delivering liposomes encapsulating cholinesterase genes, particularly, the human serum butyryl cholinesterase (Hu BChE) gene, as a treatment against nerve agents. It is emphasized that this abstract is provided to comply with the rules requiring an abstract which will allow a searcher or other reader quickly to ascertain the subject matter of the technical disclosure. It is submitted with the understanding that it will not be used to interpret or limit the scope or meaning of the appended issued claims. 37 CFR §1.72(b).

7 Claims, 6 Drawing Sheets